



State of Delaware
Clean Water Advisory Council
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Minutes of the 92nd Meeting

August 19, 2009

The Delaware Clean Water Advisory Council met Wednesday, August 19, 2009 at 9:00 a.m., at the Delaware Technical and Community College, 100 Campus Drive, Conference Room 400A, Dover, Delaware.

MEMBERS PRESENT:

Joe Corrado, Chair
Jeffrey Bross, Vice-Chair
Kevin Anderson
Lee Beetschen
Gary Burcham
Andy Burger
Joseph Charma
Eugene Dvornick
Andy Manus
Hans Medlarz
Robert Stickels

OTHERS PRESENT WERE:

Terry Deputy, DWR/Financial Assistance Branch
Daisy Lopez, DWR/Financial Assistance Branch
Davison Mwale, DWR/Financial Assistance Branch
Frank Paquette, DWR/Financial Assistance Branch
Reza Moqtaderi, DWR/Financial Assistance Branch
Greg Pope, DWR/Financial Assistance Branch
Frank Piorko, Division of Soil and Water Conservation
Kathy Bunting-Howarth, Division of Water Resources
Keith Rudy, McCrane Inc
Stan Mills, City of Rehoboth Beach
Maddy Russell, University of Delaware
Raney Greer, DNREC
Eric Lienhard, Greeley Hansen
Heather Warren, DHSS/ODW
Jim Sullivan, DNREC
Chris Fazio, Remington, Vernick & Beech
David Hugg, Town of Smyrna
Ed Lewandowski, Center for the Inland Bays
Ryan Flickinger, KCI

Randy Duplechain, DBF, Inc
David Athey, URS Corp
Dennis S. Hasson, WR&A
David Beattie, City of Wilmington
Doug Kuhns, Blue Water, LLC
James Brunswick, DNREC
Brian Turner, City of Dover
Mark Mallamo, City of Milford
Dan String, Green Stone Engineer
Dave Hill, OMB
Ken Branner, Artesian Water
Paul Hyland, DPH
Thom May, DPH
John Ashman, Sussex County
Brian Kelly, DNREC
Mike Izzo, Sussex County
Honorable Sam Cooper, Mayor, City of Rehoboth Beach
Bill Sargent, City of Rehoboth Beach
Jen Campagnini, DNREC
Dr. William Ritter, University of Delaware
Hep Ryan, New Castle County
Dave Schepens, DNREC
Sam Webb, Sussex County
David Baker, Sussex County
Kevin Donnelly, New Castle Conservation District
Kathy Weldon, DNREC
Mike Svaby, New Castle County
Roger Roy
Cherie Clark, DNREC
Bob Zimmerman, DNREC
Dianna Campagnini, First State Community
Craig Lukezic, DE SHPO
Joe Farrell, University of Delaware
Bob Kane, DBF
Dennis O'Shea, DelDOT
Richard Ponta, Ellendale Civic Improvement Association
Ron Lunt, City of Dover

CALL TO ORDER

Meeting came to order at 9:00 am.

APPROVAL OF THE AGENDA

Motion made by Mr. Burger and Mr. Manus, seconded by Mr. Medlarz to approve the agenda. Agenda approved unanimously.

CWAC MEMBER PLAQUE PRESENTATIONS – Roger Roy and Christopher O’Keefe

Mr. Corrado presented a plaque to Chris O’Keefe, former Council Member, for his contribution to the Clean Water Advisory Council. Upon arrival, a plaque was presented to Roger Roy for his contribution as Chair of the Clean Water Advisory Council from March 2007 through January 2009.

APPROVAL OF MINUTES – Council Meeting held on June 24, 2009

Motion made by Mr. Medlarz, seconded by Mr. Burger and Mr. Manus to approve the minutes. Motion passed unanimously.

CLEAN WATER ADVISORY COUNCIL UPDATE

EPA is hosting an Energy Management Workshop for Water and Wastewater Utilities on Wednesday, September 9 at the Delaware Technical & Community College, Carter Partnership Center in Georgetown.

At the workshop EPA will discuss topics on energy management from different innovative uses like windmill power, solar panels, and other energy efficient methods. A handout was provided to the Council on EPA’s other workshops that have been held in other states.

REPORTS

Administrators’ Reports

- A. Wastewater
 - i. Project Updates

Kent County Hartly Area Sanitary Sewer District had three construction contracts bid and opened on August 6; Town of Delmar Wastewater Treatment Plant upgrade began construction on June 15 and the project is 4.62% complete; City of Seaford Lift Station upgrade and expansion project was substantially completed on July 31; Sussex County Johnson’s Corner Sanitary Sewer District received a notice to proceed on Contract #1 on June 1 and construction is 25.3% complete. A detailed list of current wastewater projects was included in the handouts.

- ii. ARRA and Base CWSRF Municipal Loan Applications Status

A chart listing all the ARRA and Base CWSRF projects was presented to the Council. Projects listed are shown below:

ARRA AND BASE CWSRF PROJECTS	Proj. Num.	PPL Rank	Engineer Assigned	PER Review Status	EID Review Status	Env. Review	CWSRF Binding Commit Letter	Contract #	Plans and Specs Review	Pre-Bid Meeting	Bid Process Review	Estimated Loan Closing Date	Pre-construction Meeting	Proj. Constr. Progress	Final Inspection
ARRA FUNDED PROJECTS															
Sussex County															
* Johnson's Corner Sanitary Sewer District - Supplemental - 2009 PPL	200901	2009	Greg	Complete	Complete	Complete	Sent / Received	08-09	Complete	Complete	Complete	Aug-09	Complete	10%	
								08-10	Complete	Complete	In process				
* Woodlands of Millsboro -2009 PPL	200903	2009	Greg	Complete	In Process	Aug-09		TBD	Sep-09	Oct-09	Nov-09				
Oak Orchard Sanitary Sewer District Expansion #1	201001	2010 - 1	Greg	Complete	In Process	Aug-09		TBD	Oct-09	Nov-09	Dec-09				
Inland Bays Regional Wastewater Facility Expansion	201002	2011 - 5	Greg	Complete	In Process	Aug-09		TBD	Dec-09	Dec-09	Jan-10				
Angola Neck CWSRF Loan Refinancing	200801	2008 - 1	Greg	Complete	Complete	Complete	Sent / Received	C	Complete	Complete	Aug-09	Aug-09			
								A,B,D,E	TBD	TBD	TBD				
BASE CWSRF FUNDED PROJECTS															
Town of Smyrna															
Green Meadows Pump Station & Force Main Replacement	201003	2010 - 67	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Sewer Infrastructure from Duck Creek to Route 1	201003	2010 - 36	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Upgrade for Greensbranch Pump Station for High School Expansion	201003	2010 - 52	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Sanitary Sewer Replacement North Main Street	201004	2010 - 73	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Sanitary Sewer Replacement East Commerce Street	201004	2010 - 74	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Sanitary Sewer Replacement West Commerce Street	201004	2010 - 75	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Sanitary Sewer Mains Replacement / Upgrade South Street	201004	2010 - 76	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Sanitary Sewer Replacement West Cummins Street	201004	2010 - 77	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Upgrades of New Street Pump Station	201003	2010 - 66	Reza	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Upgrades of West Shore Pump Station	200103	2010 - 71	Reza	Cancelled	Cancelled	Cancelled		TBD	Nov-09	Dec-09	Jan-10				
Town of Georgetown															
South Bedford Pump Station	201005	2010 - 23	Reza	Complete	Complete	In process		TBD	Nov-09	Dec-09	Jan-10				
City of Milford															
North Front Street Sewer Replacement Project	201006	2010 - 25	Davison	Complete	Complete	Complete		TBD	Nov-09	Dec-09	Jan-10				
North Shores Subdivision Sewer Extension	201007	2010 - 20	Davison	Complete	Complete	Complete		TBD	Nov-09	Dec-09	Jan-10				
New Castle County															
* Belttown Sewer Repair - 2009 PPL	200907	2009	Davison	Complete	Complete	Complete		TBD	Nov-09	Dec-09	Jan-10				
* Bridleshire Farms Septic Elimination -2009 PPL	200701	2009	Davison	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
Terraces at Iron Hill Stormwater Management Pond Retrofit	201008	2010 - 84	Davison	Complete	Complete	Aug-09		TBD	Nov-09	Dec-09	Jan-10				
Hills of Hockessin Stormwater Management Pond Retrofit	201008	2010 - 82	Davison	Complete	Complete	Aug-09		TBD	Nov-09	Dec-09	Jan-10				
Country Woods Stormwater Management Pond Retrofit	201008	2010 - 81	Davison	Complete	Complete	Aug-09		TBD	Nov-09	Dec-09	Jan-10				
Barbs Farm Stormwater Management Pond Retrofit	201008	2010 - 78	Davison	Complete	Complete	Aug-09		TBD	Nov-09	Dec-09	Jan-10				
Buena Vista Stormwater Management Pond Retrofit	201008	2010 - 79	Davison	Complete	Complete	Aug-09		TBD	Nov-09	Dec-09	Jan-10				
Airport Industrial Park 2 Stormwater Management Pond Retrofit	201008	2010 - 85	Davison	Complete	Complete	Aug-09		TBD	Nov-09	Dec-09	Jan-10				
Town of Blades															
Blades Stormwater Improvements Phase II	201009	2010 - 63	Davison	Sep-09	Sep-09	Sep-09		TBD	Nov-09	Dec-09	Jan-10				
Kent County															
Ultraviolet (UV) Disinfection System	201010	2010 - 19	Reza	Complete	Complete	In process		TBD	Nov-09	Dec-09	Jan-10				
Regional WWT Facility Renewable Energy Park	201011	2011 - 4	Reza	Complete	Complete	In process		TBD	Nov-09	Dec-09	Jan-10				
City of Dover															
Rt 13 Sanitary Sewer Interceptor Project	2010xx	2010 - 30	Davison	Complete	Complete	Sep-09		TBD	Nov-09	Dec-09	Jan-10				
Fox Hall / Retreat Force Main Rerouting	2010xx	2010 - 32	Davison	Complete	Complete	Sep-09		TBD	Nov-09	Dec-09	Jan-10				
Acorn Lane Pump Station Replacement #24	2010xx	2010 - 33	Davison	Complete	Complete	Sep-09		TBD	Nov-09	Dec-09	Jan-10				
Delaware State Pump Station Replacement #18	2010xx	2010 - 26	Davison	Complete	Complete	Sep-09		TBD	Nov-09	Dec-09	Jan-10				
Infiltration/Inflow	2010xx		Davison	Complete	Complete	Sep-09		TBD	Nov-09	Dec-09	Jan-10				
City of Harrington															
* Harrington to Kent County Forcemain -2009 Amended	200905	2009	Greg	Complete	Complete	In Process		TBD	Nov-09	Dec-09	Jan-10				
City of Wilmington															
* Wastewater Treatment Plant Head Works Upgrade - 2009 PPL	200904	2009	Reza	Aug-09	Aug-09	Aug-09		TBD	Nov-09	Dec-09	Jan-10				
City of Newark															
* Relocate Sewer Lines - Emergency Project	200906	Emergency	Greg	Complete	In Process	Aug-09		TBD	Sep-09	Oct-09	Nov-09				
Rehabilitation of Sewer Lines along the Christina and White Clay Cree	2010012	2011 - 8	Greg	Sep-09	Sep-09	Sep-09		TBD	Nov-09	Dec-09	Jan-10				

All the projects will be on schedule and will be under contract or under construction before the February deadline.

Green Project Reserve Update

CWSRF ARRA Binding commitment letters have been issued for 6 GPR projects. Binding commitment letters have been issued for:

- The Challenge Program for \$150,000
- New Castle Conservation District for \$1.4 million
- Safe Haven Animal Sanctuary for \$234,100
- City of New Castle (3 projects) for \$250,000, \$630,000, and \$442,500

Binding Commitment Letters will be issued on or before September 9 for the following projects:

- University of Delaware Water Resources Agency for \$135,000
- Town of Millsboro for \$250,000

Funding is available for \$316,220 for a GPR project.

Several projects have declined funding, specifically the New Castle Conservation District, Little Mill Creek, an \$800,000 project that had already been approved decided they didn't want to fund the project; Town of Dewey Beach, Bayard Ave Drainage Project for \$750,000; City of Seaford, Washington Street Flood Control for \$3.7 million; Kent County Murderkill Wetlands Restoration for \$320,000; and Donovan Smith Mobil Home Park, tie into City of Lewes Municipal Sewer System was not eligible for GPR funding.

The next possible projects on the list for funding are:

- City of Dover, Silver Lake Stormwater Improvement for \$580,000
- Value Manufactured Homes, New Community Sanitary Septic System for Homestead Mobile Home Park for \$691,000
- South Wood II, Low Pressure Differential Membrane Filter for Manufactured Home Park in Magnolia for \$64,500
- City of Dover, St. Jones Stream Bank Restoration at Kings Highway and Washington Street Drainage for \$359,322

It was stated that the Council had at a previous meeting approved GPR projects 1 through 12 and will need to take action to approve other projects on the list. Mr. Deputy was asked to provide information on projects 14 through 17 which are the next projects, listed above, on the list for funding.

Mr. Deputy stated that since he does not have detailed information on those projects, he will follow up and send the Council more detailed information via email, however he did explain that the City of Dover is a storm water improvement project for Silver Lake; the Value Manufactured Homes in Homestead Mobile Park is a new community that has identified existing wastewater treatment system that they propose to move to their community and install as a treatment system. He stated that given the timeframe, they may not meet the schedule deadline. A financial review is also needed on this project to determine if they can pay back the loan; South Wood II project is for a Manufactured Home Park in Magnolia and want to install an existing wastewater treatment plant; and City of Dover project is a Stream Bank Restoration project for St. Jones at the Kings Highway and Washington Street Drainage.

It was stated that the reason some of the projects cannot meet the timeline is because they do not have Right-a-Way acquisitions and/or special permits that are required. It was suggested that the Council not consider those projects that require Right-a-Ways certification or CORPS permits since they will not meet the February deadline.

A motion was made by Mr. Manus and seconded by Mr. Burger to move to the next GPR projects on the list ranking up to project number 17 and based on the readiness criteria allow staff to make the determination to fund the projects that will meet the timeline. Motion passed unanimously.

The following chart was presented to the Council to show what each project will pay back on the loan. The New Castle Conservation District project will repay at loan closing; other projects will repay at completion of the construction and other projects will repay in 5 years.

	Loan Request	Loan Principal Forgiveness	Tentative		
			To Be Repaid at Loan Closing	To Be Repaid at Completion of Construct.	To Be Amortized 5 Years
The Challenge Program					
Construction Training and Education Center	150,000	75,000		75,000	
U. of Del. Water Resources Agency					
Green Infrastructure Renovation Projects along Cool Run	135,000	67,500		TBD	
New Castle Conservation District					
Wilmington Silverbrook Run C.S.O.	1,440,000	720,000	720,000		
Town of Millsboro					
Wastewater Disposal and Reuse	250,000	125,000			TBD
Safe Haven Animal Sanctuary of Sussex County					
Sussex County Safe Haven Animal Sanctuary	234,100	117,050		117,050	117,050
City of New Castle					
Storm Water Management Facility Retrofit Projects	250,000	125,000			125,000
City of New Castle					
Washington Park Flood Mitigation	630,000	315,000			315,000
City of New Castle					
Buttonwood Dike Flood Mitigation	442,500	221,250			221,250
TBD					
TBD	316,220	158,110	TBD		
	3,847,820	1,923,910	720,000	192,050	778,300

It was asked if the money being repaid through the Conservation District would be available immediately to fund other projects. It was stated that this money is going back to corpus and although it may be tagged for the Green Project Reserve, it would become a revolving loan program and not a grant and loan program. It was stated that all the projects are eligible for funding through the Clean Water SRF program but the projects will not be eligible for the principal forgiveness.

B. Financial Reports

i. Cash Flow Model

It is projected that \$90 million will be used for CWSRF projects funded by March 31, 2010; \$49.6 million for existing CWSRF funding; \$23 million for possible USDA co-funding; \$18 million for the ARRA projects that must be under contract or in construction by February 17,

2010; and \$1.57 million for STAG Grant and Developer Contribution. All municipal loan applications have been received.

The Finance Subcommittee held a meeting and approved to adopt the Cash Flow Model. The model will be updated monthly. Obligated funds reflects the money committed to wastewater projects while Disbursed funds represent actual money that has been spent for projects. On average, municipal wastewater projects take time to complete construction. The difference is the cash flow opportunity to fund additional projects, given new funding and loan repayments. Some of the projects will be presented to the Council today for their approval.

The following summarized Financial Report was presented to the Council for the month ending June 2009:

				(Millions of \$)	
				Obligation of Funds	Disbursement of Funds
Actuals Through May, 2009					
Source of Funds					
Cap. Grants + State Match - Admin				\$ 170.9	\$ 170.9
SRF Loan Repayments				\$ 48.3	\$ 48.3
NPS Loan Repayments				\$ 6.8	\$ 6.8
Investment Interest				\$ 8.8	\$ 8.8
				\$ 234.7	\$ 234.7
Total Approved Loan Dollars:					
42 Municipal Loans				\$ 183.1	\$ 160.6
NPS Loans				\$ 11.3	\$ 12.7
				\$ 194.4	\$ 173.3
Balance Available for Loans				\$ 40.3	\$ 61.4
Projected June 1, 2009 through June 30, 2010					
Source of Funds					
Pending FY10 Cap. Grant + State Match				\$ 3.9	\$ 3.9
SRF Loan Repayments				\$ 9.9	\$ 9.9
Investment Interest				\$ 0.8	\$ 0.8
				\$ 14.6	\$ 14.6
Loan Dollars					
Municipal Loans				\$ 68.1	\$ 12.5
NPS Loans				\$ 1.0	\$ 1.0
				\$ 69.1	\$ 13.5
Balance Available for Loans				\$ (54.5)	\$ 1.1
Cumulative				\$ (14.2)	\$ 62.5

Mr. Deputy presented the Council with charts showing the capitalization grant – state match amount; cumulative amount; additional income; principal and interest; investment interest; total from all sources of funding; and loan commitment.

ii. 21st Century Fund Account

21st Century Fund report was presented for the month ending June 2009. There is no new money in the fund. In the Infrastructure Planning Account there is \$0; in the Wastewater Management Account there are \$1.5 million. From a Sussex County Returned Project Grant we received

\$200,000; and in unencumbered there is \$1.7 million. In the Clean Water State Match there is \$0. There is a total of \$3.45 million available in the 21st Century Fund

iii. Non-Federal Administrative Account – Programs

The chart below was presented to the Council:

Non Federal Administrative Account (8822)										
Sources of Revenues:										
		Actual				Projections				
		FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
1.	Investment Interest	\$179,257	\$290,805	\$311,634	\$162,871	\$168,000	\$173,000	\$178,000	\$183,000	\$188,000
2.	Administrative Fee - Projects	\$973,072	\$1,339,850	\$1,579,907	\$1,709,471	\$1,700,000	\$1,795,000	\$2,039,000	\$2,256,000	\$2,418,000
	Total Annual Revenues	\$1,152,329	\$1,630,655	\$1,891,541	\$1,872,342	\$1,868,000	\$1,968,000	\$2,217,000	\$2,439,000	\$2,606,000
Current Use of Funds:										
3.	FAB Administrative Expenses	\$585,838	\$652,421	\$601,547	\$541,126	\$557,000	\$574,000	\$591,000	\$609,000	\$627,000
	Non Federal Admin. Fund Growth:	\$566,491	\$978,234	\$1,289,994	\$1,331,216	\$1,311,000	\$1,394,000	\$1,626,000	\$1,830,000	\$1,979,000
	Non Federal Admin. Fund Cumulative:	\$5,567,491	\$6,545,725	\$7,835,719	\$9,166,935	\$10,477,935	\$11,871,935	\$13,497,935	\$15,327,935	\$17,306,935
New Uses of Funds:										
4.	CWSRF State Match					\$654,860	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
5.	Water Resources Salaries					\$520,900	\$537,000	\$553,000	\$570,000	\$587,000
6.	Planning and Design RLF (Loans)					\$2,000,000				
7.	SEFO Program					\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
8.	Community Water Quality Projects					\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
9.	Wastewater Matching Grants					\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
10.	Stormwater Matching Grants					\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
11.	Stormwater Position Salary					\$66,500	\$68,000	\$70,000	\$72,000	\$74,000
	Total Proposed Uses					\$4,492,260	\$3,855,000	\$3,873,000	\$3,892,000	\$3,911,000
	Non Federal Admin. Annual Balance:	\$5,567,491	\$6,545,725	\$7,835,719	\$9,166,935	\$5,985,675	\$8,016,935	\$9,624,935	\$11,435,935	\$13,395,935
Notes:										
1. Investment Interest is projected to increase by 3% per year										
2. Administrative Fee - Projects are based on projected municipal loan interest payments to the NFAC										
3. FAB Administrative Expenses are projected to increase by 3% per year										
4. SRF Reauthorization may require \$2.0 million per year over the next 4 years										
5. Water Resources Salaries are projected to increase by 3% per year										
6. Stormwater Position Salary is projected to increase by 3% per year										

The Non-Federal Administrative fund account is separate from the Revolving Account. The Non-Federal Account is governed by EPA guidelines associated with water quality and improvement type projects. This account funds loans for 20 years and collects interest during those 20 years.

The chart shows the actual uses for Investment Interest and Administrative fees from FY 06 through FY 09 and the projected uses for FY 10 through FY 14. There are new uses of the fund that have been approved by the Council to begin FY 10 through FY 14. As of FY 09 there are \$9.16 million in this account.

It was stated that in looking at the Current uses in FY 09 and FY 10 the staff salaries increases from 6% to 11% and if this fund is going to be a stock gap for funding, the Council needs to take cautionary measures so that in the long term those increases doesn't create a problem with this account.

Mr. Corrado asked the Council members to consider setting up a secured reserve account around the 21st Century Fund for grant funding to use for projects that do not qualify for other funding loan programs and for those projects that, for whatever reason, cannot be funded without a grant; set up an account that would be protected where the funds do not get recouped for balancing the State's Budget. A decision didn't need to be made at today's meeting but will be an agenda item for the next meeting.

It was stated that a program for grant monies needs to be created to help projects that do not have funds. The City of Rehoboth Beach is a good example; they have a project that is important for the entire State of Delaware but there are no grants available to help fund their project.

It was suggested that for the next meeting get background on how other states are handling their Non-Federal Administrative Account, the criteria for EPA statutory authority, and that Council should start working on Criteria for use of the fund with respect to the additional salaries that the Council is paying for. It is important to know how those individual work programs relate to the accomplishments of the Council.

It was stated that the Council had been asked to set up criteria for this fund but was placed on hold until some resolution was made as to who will be controlling this fund. Both Wastewater and Surface Water Subcommittees were asked to come up with respective criteria for use of this fund, but it hasn't been done yet.

It was stated that at the Finance Subcommittee meeting the salary increases were discussed and it was mentioned that any salary or personnel increases paid through this fund would be for Stormwater and Wastewater purposes only.

It was stated that the Council is also due to revisit the ranking criteria for the corpus of the fund. This will also be added to the next meeting's agenda.

C. Surface Water

i. NCC Stormwater Utility Planning Report

Upon request, a follow up was done with New Castle Council staff on the Stormwater Utility Planning project. A meeting was held with Tracey Surles, Mike Svaby, Wayne Merritt, Robert Baldwin and Frank Piorko to discuss the project and set the timeline for receiving the report. A draft final report should be completed by September.

Mr. Corrado asked Mr. Piorko to have that report to the Council prior to the next meeting so that they can read it before the meeting. Mr. Piorko stated that he will do his best to get that draft report to the Council.

The Kent County Level of Service draft has been wrapped up. Kent County, Kent Conservation District, and DNREC met to discuss the next steps which are to focus on a watershed concept for a model rate and service plan and for a legislative briefing in the fall with both Kent County Levy Court and State Legislators in Kent County to discuss this project.

ii. Drainage 21st Century Fund Recommendations

A joint Stormwater and Finance Subcommittee meeting needs to be scheduled to review the recommendations before getting a smaller group together. The smaller group needs to consist of representatives from the budget office and controller's office.

iii. Stormwater Planning Grant

Mr. Piorko reported that they have permission to move forward with this planning grant and is looking to the Financial Assistance Branch for guidance. He couldn't remember if the Council approved \$100,000 or \$150,000.

It was stated that \$100,000 was the amount recommended but would like to see it matched to the same magnitude as the Wastewater grant. It was also stated that the Wastewater and Stormwater Planning Grants were tabled by the Council and the Chair requested a joint subcommittee meeting be held. The joint meeting, to this date, has not been held. A joint subcommittee meeting needs to be scheduled and held before the next Council meeting.

iv. Update on Watershed Modeling

A presentation was presented to the Council by Mr. Randy Greer on the Watershed Study. The Puncheon Run Sub-watershed was contracted by Kent Conservation District with URS in the amount of \$40,000; the Appoquinimink Watershed was contracted by DNREC with Borton-Lawson in November 2006 in the amount of \$250,000; the Murderkill Watershed was contracted by DNREC with URS in December 2008 in the amount of \$250,000; and portion of the Nanticoke Watershed was contracted by DNREC with URS in February 2008 in the amount of \$235,000.

The typical watershed study schedule consists of 4 Stages: Stage A is data collection and analysis; Stage B is technical analysis; Stage C is public and municipal participation; and Stage D is plan preparation and implementation.

The Puncheon Run Study is located in Kent County and is approximately 4 square miles. This location encountered problems with existing drainage and flooding. The primary goal was to manage stormwater runoff as build out occurs. This project has been completed and is being implemented by the Kent Conservation District.

The Appoquinimink Watershed is located in New Castle County and is approximately 48 square miles. This is the fastest growing watershed in New Castle County. The primary goal is to plan for future growth. A meeting occurred with the Consultant on July 7. This project is in Stage D – plan preparation and implementation.

The Murderkill Watershed is located in Kent County and is approximately 100 square miles. This is the fastest growing watershed in Kent County and the primary goal for this watershed is to plan for future growth. A meeting occurred with the Consultant on August 10. This project is in Stage B – technical analysis.

The Nanticoke Watershed portion is located in Sussex County and is approximately 25 square miles above Williams Pond dam. This watershed is currently experiencing drainage problems. The goal for this watershed is to solve the existing drainage problems and plan for future development. A meeting with the consultant occurred on August 10. This project is in Stage B – technical analysis.

This issue was tabled due to extensive discussion that this study needs to include hydrodynamic model and the Council needs further dialogue and discussion to look at the quantitative and qualitative components for watershed modeling.

SUBCOMMITTEES' REPORTS

A. Wastewater

The Wastewater Subcommittee has been focusing on the Beneficial Reuse program. They have created a set of potential uses and drivers. A meeting has been set up with DNREC's Secretary and the Agricultural Director for September 17. Andy Burger has joined the Wastewater Subcommittee.

B. Surface Water Management

The Surface Water Management Subcommittee report was discussed under the Administrator's report.

C. Public Outreach

Michelle Jacobs has agreed to help the Public Outreach Subcommittee with the Newsletter. They are working on getting the fall issue completed and distributed. Also have a Scope of Services with an outside contractor and will review for more details.

D. Forestland Conservation

The Forestland Conservation Easement working group had their first meeting. The Subcommittee is comprised of Terry Deputy for staff support for financial assistance information; Austin Short, State Forester; Kevin Anderson CWAC member; Doug Simpson, Forestland Owner; Blaine Phillips from the Conservation Fund; and Andy Manus, CWAC Member and Chair of the working group. They created an outline on the topic and they are studying to get background information and will report back with more details at the next Council meeting.

E. Finance

The Finance Subcommittee had a meeting and focused their discussion on the charts reported in the Financial Reports. The Chair of the Surface Water Management Subcommittee attended the meeting and it was helpful to match their topics with the funding. This committee needs 1 or 2 more Council members join their committee. Currently, Mr. Stickels is the only CWAC member on that committee. Mr. Dvornick and Mr. Anderson volunteered to be on the Finance Subcommittee.

It was requested that a list of Subcommittees and their members be distributed to the Council Members.

Mr. Joe Charma volunteered to be on the Surface Water Management Subcommittee.

OLD BUSINESS

None

NEW BUSINESS

Sussex County Presentation – County/City of Rehoboth Wastewater Disposal Planning Study

A presentation was given by Mr. Mike Izzo, Sussex County and Mr. Dennis Hasson, WR&A. They were asked to update the Council on the Regional Planning Report. The Regional Planning report is a joint Sussex County/City of Rehoboth Land Application project.

The City Treatment Plants serve communities in Dewey Beach, Rehoboth Beach, North Shores and Henlopen Acres. These communities have no more room for growth. Two counties impacted are the Inland Bays Regional Wastewater facility (IBRWF) and the Wolfe Neck Regional Wastewater Treatment facility (WNRWF). Both areas still have room for growth.

The purpose of this project was to look at the impact of a joint land application project between Sussex County and City of Rehoboth Beach and compare that to the ocean outfall. The planning report is from 2009 thru 2030. The flows in this area are West Rehoboth Expansion with 4.4 million gallons per day (MGD), (1.); Inland Bays Service Area flows with 2.9 MGD; and the Rehoboth Beach flow with 2.5 MGD, (2.). Total Treatment and Disposal Capacity Required through 2030 is 9.8 MGD.

Alternatives for this project are:

- Alternative 1A: Raw Wastewater to the WNRWF with Treatment at the IBRWF. The Wolfe Neck Service Area with flow at 4.4 MGD, will flow to the WNRWF and the City of Rehoboth with flow at 2.5 MGD with Raw WW, will flow to the WNRWF; the Inland Bays Service area with a flow of 2.9 MGD will flow to the IBRWF and the WNRWF with flow of 4.6 MGD (Excess) will flow to the IBRWF.
- Alternative 1B: Same as 1A but the WNRWF with flow of 4.6 MGD (Excess) would flow to a private Wastewater provider.
- Alternative 2A: Wolfe Neck Service area with 4.4 MGD will flow to WNRWF with 3.1 MGD capacity available; City of Rehoboth with 2.5 MGD (Raw WW) will flow to WNRWF; Inland Bays Service Area with 2.9 MGD will flow to IBRWF with 6.5 MGD capacity; and WNRWF with 3.6 MGD (Excess) will flow to the IBRWF.
- Alternative 2B: Same as 2A but the WNRWF with 3.1 MGD capacity will flow at 3.6 MGD (Excess) to a Private WW Provider with 3.6 MGD capacity.
- Alternative 3: Would consist of separate treatment and disposal for the County and City. The Wolfe Neck Service Area would flow to the WNRWF to the IBRWF. The Inland Bays Service Area would flow to the IBRWF. The City of Rehoboth would flow to an Ocean Outfall.

Note that all flow rates refer to year 2030 Max month treatment and disposal requirements.

Of the 5 alternatives, 1A's total capital cost is \$112 million; alternative 1B thru 3 capital costs are \$99 million each. A fourth Alternative would be to combine the Ocean Outfall with Wolfe Neck and City of Rehoboth. Total cost for that alternative would be \$92 million.

It was stated that this is a very costly project and the Council does not have the money to fund this project but the Council is willing to do what is necessary to help look for funding for this project or explore other ways to get this project together. It was suggested that Sussex County and City of Rehoboth work with Terry and aside from grant money, look at numbers for a low interest or no interest loan.

Draft RFP – Proposed Reassessment of Wastewater Treatment Plants – Scope of Work

A draft RFP was given to the Council; changes to the proposal are shaded in the handout. Mr. Deputy stated that he would like to move forward with the RFP. It was stated that Mr. Deputy has done a great job and a motion by Mr. Bross was made, seconded by Mr. Dvornick to approve and move forward with the RFP. Motion passed unanimously.

Proposed Study of Lands Suitable for Spray Irrigation Presentation – William Ritter, Ph.D, P.E.

Dr. William Ritter gave a presentation to the Council on Potential Spray Irrigation in Delaware. Classifications of Wastewater Reuse are: Agricultural and Landscape Irrigation; Industrial Reuse; Groundwater recharge; Recreational Uses; Non-potable Urban use; and Potable Reuse. Land Treatment Systems are for slow rate systems; overland flow systems; and rapid infiltration systems

The slow rate systems application rate of 1 to 4 inches a week; a crop such as corn, sorghum, reed canary grass, alfalfa, soybeans is grown on a slow rate system. The water used by crop and soil removes pollutants. Wastewater is at least secondary treated and water table should be 5 feet below the surface.

Spray Irrigation is not a new concept; it has been around since the 1500s. In 1531, Bunzlau, Germany sewage farm started and operated for over 300 years. In 1650, a system started operating near Edinburgh, Scotland. In the 1800s, in North America, there were 143 treatment plants with the majority being sewage farms.

Only two plants west of the Mississippi were not sewage farms. Most of the early farms grew vegetables. In 1888, Mr. Allen presented a paper before ASCE on sewage disposal and the question came up of odors on sewage farms.

In the 1940s, Cannary spray irrigation started for the Fruit and Vegetable Industry. In 1957, 200 industries used spray irrigation. In 1965, effluent disposal on land was estimated to be 2,400 systems with 900 used by food processors.

In the 1970s and 1980s, there was a great renewal of interest in land application. Land application was classified as innovative technology and was eligible for 85% of federal funding under the Clean Water Act. In 1962, Penn State began research on living filter and by the 1970s had two symposiums and workshops.

Delaware's Spray Irrigation history shows that in the 1960s, Clifton Canning, Wheatley Foods, Cannon Foods, and the American Original all used spray irrigation; in 1970, Townsend started using spray irrigation on corn for poultry processing plant, and in the 1980s, Draper Canning Company used spray irrigation for vegetables.

Spray Irrigation was proposed for Rehoboth-Lewes in the 1970s and in Bridgeville in the 1980s. The first municipal spray irrigation was for an apartment complex west of Dover. In the 1990s, there was an Inland Bays system on Long Neck and Water Farm #1 in New Castle County, and in 2004, Middletown system came on line.

Proposal objectives for Delaware would be to evaluate spray irrigation as a potential alternative wastewater disposal process for developing areas and compare the costs of spray irrigation with other wastewater treatment options.

The project tasks would be to identify sites for spray irrigation based upon soil and distance from proposed development; evaluate alternate crops for the sites based upon nutrient uptake and potential economic return; rank sites in three categories from highest to lowest potential based upon costs compared to other systems and soils; prepare a GIS map of potential sites; and prepare a final report.

Some of this work has been done for the Chesapeake Bay project. The project objectives would be to view state regulations; evaluate the soil type, structure, and permeability of selected sites; estimate how much nitrogen and phosphorus will be diverted from the Bay through this method; and compare the cost of land application for the sites chosen to the biological nitrogen removal.

Methods would be to review state regulations to see the obstacles to allow land treatment by spray irrigation in each state; identify the major publicly owned treatment facilities in the Bay watershed; identify potential plots of land within a 5 mile radius of the treatment facility; and record the soil type, acidity, slope of each area and evaluate its suitability to receive wastewater.

It was asked if the evaluation included summation for Rapid Infiltration. It was stated that it did not, but if a study is done for Delaware, that could be included.

Kent County has one treatment facility and does not need a study done. Mr. Stickels stated that he would like to see a study done for Sussex County.

Motion made by Mr. Manus and seconded by Mr. Burger, to have Dr. Ritter develop a proposal, to be submitted to Council, for this study and include in the study alternative means of disposal. Motion passed unanimously.

Town of Smyrna – 9 Municipal Sewer Project Requests

The Town of Smyrna has 9 Municipal Sewer project requests for funding. Project encompasses replacement of 3,878 feet of old undersized terra cotta sanitary sewer lines with 8" PVC piping for South Street, West Cummins Street, North Main Street, East Commerce Street and West Commerce Street.

The project also encompasses improvements, upgrades and pump replacements at three existing wastewater pump stations to reduce frequent maintenance and emergency repairs and eliminate potential health concerns due to sewage surcharge and leaks to the New Street Pump Station, Green Meadows Pump Station, and the Green Branch Pump Station. The cost for this project is \$5.9 million. Cost per resident will be \$488.

There will be a General Obligation (GO) Bond secured by the full faith and credit and taxing power of the city. The interest rate for this loan will be 2% annually. Interest only will be payable during construction in semi-annual installments. Upon completion, level debt principal and interest payments will be paid semi-annually in an amount sufficient to amortize the outstanding loan balance over a 20 year term.

The Financial Assistance Branch recommends Council approve a binding commitment to the Town of Smyrna for a \$5.975 million loan from the CWSRF for the proposed Sewer Main Replacement and Pump State Upgrades.

Motion made by Mr. Dvornick, seconded by Mr. Manus and Mr. Burger to approve this project request. Motion passed unanimously.

New Castle County – 2 Municipal Sewer Project Requests

New Castle County has 2 projects that need funding; the Belltown Sewer Repair and the Bridleshire Farms Septic Elimination projects. The Belltown sewer pipeline upgrade project will remove approximately 3000 feet of an existing 8 inch gravity sewer line located along Rt. 896 and partly along Summit Bridge Road adjacent to the Hodgson Vo-Tech School. This pipe will be replaced by 700 feet of 10 inch gravity sewer lines and 2300 feet of 12 inch gravity sewer pipe along with 13 manholes.

The Belltown Sewer Repair project will eliminate septic systems from fifty six (56) single family homes located in the Bridleshire Farms area in northwestern New Castle County. Some septic systems in this community are failing and some are expected to fail in the near future and the homeowners have requested the County to connect them to the county sewer system.

Environmental reviews have been completed for both projects. The loan will be a GO Bond pledging the full faith, credit, and taxing power of the County. The interest rate will be 2% annually and will be

payable semi-annually during construction. Upon completion, semi-annual payments of principal and interest shall be payable in an amount sufficient to amortize the outstanding principal balance over a 20 year term. Total cost for this project is \$4.1 million. Cost per residential EDU is 184.

Based on the sound financial status of New Castle County and the positive environmental impact of the project, the Financial Assistance Branch recommends the Council approve a binding commitment for a loan in the amount of \$2.7 million from the CWSRF.

Motion made by Mr. Bross, seconded by Mr. Manus and Mr. Burger to approve this project request. Motion passed unanimously.

Kent County – 2 Municipal Sewer Project Requests

Kent County has 2 project requests for funding for Kent County Regional Wastewater Treatment Facility (KCRWTF) and the UV Disinfection.

The KCRWTF Energy Park project proposes the installation of renewable energy generating systems at the KCRWTF for use at the facility. The UV Disinfection project includes the installation of a UV Disinfection System at the KCRWTF and removal of the existing chlorination and de-chlorination processes. Total cost for this project is \$9.98 million.

The loan is to be a GO Bond secured by the full faith and credit and taxing power of the County. The interest rate will be 2% annually and will be payable during construction in semi-annual installments. Upon completion the level debt principal and interest payments will be paid semi-annually in an amount sufficient to amortize the outstanding loan balance over a 20 year term.

The Financial Assistance Branch recommends Council approve a binding commitment to Kent County for \$9.27 million from the CWSRF for the proposed Regional WWT facility Renewable Energy Park and UV Disinfection projects.

Motion made by Mr. Stickels, seconded by Mr. Burger to approve this project request. Motion passed with majority votes. Mr. Medlarz abstained from voting.

City of Milford – 2 Municipal Sewer Project Requests

The City of Milford has 2 Sewer projects; the North Front Street Sewer Replacement project and the North Shores subdivision Sewer Extension project.

The North Shores subdivision sewer extension project will eliminate failing septic systems from sixty (60) homes in the City of Milford, Kent County, to meet Nitrogen and Phosphorous TMDL goals of 57% reduce bacteria from the Mispillion watershed by 87% upgrade to the North Shores Drive pump station and install grinder pumps.

The North Front Street sewer project will remove and replace approximately 1950 feet of an existing 50 year old Terra Cotta clay main interceptor gravity sewer line located along North Front Street in the city of Milford, Kent County. CCTV inspection revealed that the sewer mains is in poor condition and contributes to excess inflow and infiltration being experienced by the City. The sewer mains need immediate replacements.

The proposed project will install 1,350 feet of 24 inch gravity sewer mains, 350 feet of 18 inch mains, 250 feet of 6 inch gravity sewer mains, 800 feet of 4 and 5 inch sewer laterals and install 12 gravity sewer manholes and miscellaneous restoration works. Environmental reviews have been completed for both projects. Total cost for this project is \$2.38 million.

The loan is to be a GO Bond with an interest rate of 2% annually. Interest will be payable during construction in semi-annual installments. Upon completion, level debt principal and interest payments will be paid semi-annually in an amount sufficient to amortize the outstanding loan balance over a 20 year term.

The Financial Assistance Branch recommends the Council approval a binding commitment to the City of Milford for a \$2.38 million loan from the CWSRF for the proposed North Front Street Sewer Replacement and North Shores Subdivision Sewer Extension projects.

Motion made by Mr. Dvornick, seconded by Mr. Manus to approve this project request. Motion passed unanimously.

City of Dover – 5 Municipal Sewer Project Requests

The City of Dover has 5 project requests; the Rt. 13 Sanitary Sewer Interceptor project proposes to abandon both the Schwartz pumping station, and 1,150 feet of 6 inch force main located between the existing Schwartz pumping station and a gravity manhole located at the entrance to the Delaware State Police Barracks station on Rt. 13. A new Rt. 13 interceptor will collect sewage from the abandoned Schwartz pumping station gravity mains and sewage flow diverted from the Delaware State University (DSU), McKee Road, and Del Tech pumping stations, directly to the US Rt. 13 pumping station.

The Fox Hall/Retreat Force Main Rerouting project involves construction of a new sewer force main that will divert sewage flows currently discharged from the Fox Hall pump station to the Walker Road pump station, by rerouting these flows through a new sewer force main to a gravity manhole in the Meadows subdivision. From the manhole, sewage will flow by gravity to the McKee Road Pumping Station, which is currently underutilized.

The Acorn Lane Pump Station Replacement #24 project will involve replacement of the existing recessed wet well mounted package pumping station, with new pumps to provide sanitary sewer services to the existing Independence Village subdivision and the new Patriot Village, Lexington Glenn, and Clearview Meadows subdivision.

The Delaware State University Pump Station #18 project will involve the replacement of existing Smith & Loveless package capsular station installed in 1975.

The Inflow/Infiltration Removal Sanitary Sewer Main Relining will involve relining and structural repair of sanitary sewer mains. The sanitary sewer mains are cracked, fractured or broken and allow ground water into the sewer system.

Engineering and Environmental reviews have been completed for all 5 projects. The total cost for these projects is \$5.9 million. The loan will be secured by a Revenue Bond Obligation of the water and sewer system. The interest rate will be 2% and will be payable during construction in semi-annual installments. Upon completion, the level debt principal and interest payments will be paid semi-annually in an amount sufficient to amortize the outstanding loan balance over a 20 year term.

The Financial Assistance Branch recommends Council approval of a binding commitment to the City of Dover for \$5.9 million from the CWSRF for the proposed Rt. 13 Sanitary Sewer Interceptor, Fox Hall/Retreat Force Main Rerouting, Acorn Lane Pump Station Replacement #24, Delaware State University Pump Station #18 and Inflow/Infiltration Removal Sanitary Sewer Main Rerouting projects.

Motion made by Mr. Manus, seconded by Mr. Burger to approve this funding request.

There was a question if a Force Main Rerouting to the Del Tech Pump Station to Rt. 13 was included in the proposal. It was stated that it was not included in the plan for the future. It is just a replacement. It

does not include in the rerouting to the McKee Station and the McKee Station is already causing problems.

Amended motion made by Mr. Medlarz to closely coordinate the activities of this account. Motion was seconded by Mr. Manus. Motion passed unanimously.

City of Wilmington – Municipal Sewer Project Request

The City of Wilmington is requesting funding for a Wastewater Treatment Plant Head Works Upgrade. This project proposes modifications at the headworks of the Wilmington Waste Water Treatment Plant to optimize and increase flow handling capacity of the plant during wet weather conditions by improving the distribution and bypass capabilities of the plant. This project in conjunction with other ongoing projects will mitigate the volume and frequency of combined sewer overflows in Wilmington and allow processing of up to 400 MGD of flow during wet weather events at the WWTP in compliance with the NPDES permit.

The total cost for this project is \$3.2 million. The loan is to be secured by a GO Bond with 2% interest annually. Interest only will be payable during construction and upon completion, level debt principal and interest payments will be for a 20 year term.

The Financial Assistance Branch recommends Council approve a binding commitment to the City of Wilmington for a \$2.8 million loan from the CWSRF for the proposed Wastewater Treatment Plant Head Works.

Motion made by Mr. Bross, seconded by Mr. Anderson to approve this project request. Motion passed unanimously.

Future CWAC Meeting Dates

The next Council meetings are schedule for September 16, October 21, and December 16. All meetings will be held at the Delaware Technical and Community College, Terry Campus, Dover.

PUBLIC COMMENT

Mr. Baker thanked the Council for approving the projects for Sussex County.

GOOD OF THE COUNCIL

None

ADJOURNMENT

Next meeting will be held on September 16, 2009 at Delaware Technical and Community College, Terry Campus, Dover in Conference Room 400A beginning at 9:00 am.

Motion made by Mr. Burger to adjourn the meeting. Meeting adjourned at 11:45 am.